IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/648,029

Confirmation No.

2417

Applicants

Kenneth J. KLEDZIK et al.

Filed

26 August 2003

TC/Art Unit

2814

Examiner

N. Ha

Docket No.

009.2005

Customer No.

49837

EXHIBIT A TO REPLY UNDER 37 C.F.R. § 1.116

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Application No. 10/648,029 Confirmation No. 2417

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Commissioner for Patents Alexandria, VA 22313-1450

Sir:

I, Kenneth Kledzik, declare the following:

- 1. I am an inventor of the above-identified patent application, serial No. 10/648,029, filed 26 August 2003, and is a continuation of US Patent 6,713,854 filed 10 October 2000.
- 2. I have read and I am familiar with the Office Action mailed 18 August 2005 pertaining to this application.
- 3. I understand that in the Office Action mailed 18 August 2005 the Examiner rejected claims 35-67 as obvious over U.S. Patent No. 6,222,739 issued to Bhakta et al. ("Bhakta")in view of Published U.S. Patent Application 2003/0122240 filed by Lin et al. ("Lin").
- 4. I have read and I am familiar with the *Lin* patent. It is my understanding that the *Lin* patent was filed on 21 February 2003 and published on 3 July 2005. I also understand that the *Lin* patent claims priority to U.S. patent application No. 09/573,955, filed on 19 May 2000.
- 5. I attest that prior to 19 May 2000 I conceived of the invention claimed in at least claims 35, 47 and 58 of the present patent application.

- 6. I attest that prior to 19 May 2000, I asked Michael Chabot to assist with implementing certain manufacturing processes for making certain carriers like those described in certain portions of the present patent application. Example carrier designs that we contemplated, prior to 19 May 2000, included a carrier with a ball gird array for connection with a circuit board, mounting pad locations located on the top of the carrier, a recess in the carrier, at least one IC package coupled with the carrier, and an interconnection array conductively coupling IC package mounting pad locations with a circuit board.
- 7. Exhibit A shows two pages of notes taken by Michael Chabot in response to our discussion. This document was prepared prior to 19 May 2000 and bears a date prior to 19 May 2000 (actual earlier dates redacted, *see* MPEP §715.07). This document supports my recollection that prior to 19 May 2000 I had conceived of and discussed with Michael Chabot certain carriers, which are disclosed in the present patent application. Exhibit B is a copy of the notes with specific drawing circled for easier identification.
- 8. Circled on page 1 of Exhibit B is a drawing made by Michael Chabot showing a carrier with a ball grid array and two IC packages attached to the top and the bottom of the carrier. I recall that the carrier represented by the drawing also included an interface and mounting pad arrays for the IC packages. I recall that the carrier interface and the mounting pad arrays were conductively bonded. I also recall that the carrier included an interface between the carrier and connection pads on a circuit board to which it may be attached.
- 9. Circled on page 2 of Exhibit B is another drawing made by Michael Chabot showing a mounting pad array, a ball grid array, and a recess within the carrier. The drawing also shows an IC package connected to the top of the carrier and another beneath the carrier. I recall that the recess in carrier in this drawing was designed for an IC package to fit on a circuit board beneath the carrier. I also recall that the carrier included a mounting pad array coupled with a carrier interface and the carrier's ball grid array was also coupled with the carrier interface.
- 10. The IC packages shown in the drawings circled on pages 1 and 2 include a body and ball grid array connectors. I recall that the ball grid arrays on the IC packages were conductively bonded to the mounting pad arrays on a carrier or a circuit board.
- 11. I further attest that I continued to work with Michael Chabot on a process to produce the

Declaration of Mike Chabot

invention at least until filing U.S. Patent No. 6,713,029 on 10 October 2000, from which the present application claims priority.

- 12. The discussion I had with Michael Chabot described above occurred in California. The work performed on these carriers to implement manufacturing processes for the carrier was done in California.
- 13. All statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that the statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and such willful false statements may jeopardize the validity of the application or any patents issuing thereon.

nventor: Kenneth Kedzik

Date: JAN. 15, 2006